

## WHAT IS CLAIMED IS:

- 1                   1.       A method for generating a page, the method comprising:  
2                   determining a data source specification and a layout specification for the page,  
3       the data source specification and layout specification being declaratively specified by a user,  
4       the data source specification including access information for a data source;  
5                   retrieving data for the data source based on the data source specification and  
6       the access information;  
7                   determining a layout for the data based on the layout specification; and  
8                   generating the page using the data and the determined layout.
- 1                   2.       The method of claim 1, wherein the data source specification  
2       comprises a data type for the data source.
- 1                   3.       The method of claim 2, wherein the data type comprises at least one of  
2       a spreadsheet data type, XML data type, SQL data type, web service data type, and a web  
3       page data type.
- 1                   4.       The method of claim 1, wherein the access information comprises a  
2       path to the data source.
- 1                   5.       The method of claim 4, wherein the path comprises a URL.
- 1                   6.       The method of claim 1, wherein the data source specification  
2       comprises a filtering specification that filters data retrieved from the data source.
- 1                   7.       The method of claim 1, wherein the layout specification comprises at  
2       least one of a tabular layout, chart layout, news layout, form layout, and bullet layout.
- 1                   8.       The method of claim 1, wherein determining the layout comprises  
2       formatting the retrieved data into the layout.
- 1                   9.       The method of claim 1, wherein the page comprises a web-based page.
- 1                   10.      The method of claim 1, wherein the page comprises a portlet.
- 1                   11.      A method for generating a graphical user interface (GUI), the method  
2       comprising:

3                    providing a data source interface that enables a user to declaratively specify  
4                    access information for a data source;  
5                    determining a declarative specification for the data source;  
6                    retrieving data for the data source using the access information;  
7                    providing a layout interface that enables the user to declaratively specify a  
8                    layout for the determined data;  
9                    determining a layout specification for the determined data; and  
10                    generating a graphical user interface based on the declarative specification for  
11                    the data source and the layout specification for the determined data.

1                    12.     The method of claim 11, wherein the data source interface comprises  
2                    one or more data types that enables a user to specify a data type for the data source.

1                    13.     The method of claim 12, wherein the one or more data types comprise  
2                    at least one of a spreadsheet data type, XML data type, SQL data type, web service data type,  
3                    and a web page data type.

1                    14.     The method of claim 12, wherein determining the data comprises using  
2                    the specified data type and the access information to retrieve the data for the specified data  
3                    source.

1                    15.     The method of claim 11, wherein the access information comprises a  
2                    URL.

1                    16.     The method of claim 11, further comprising providing a filtering  
2                    interface including filtering options for the retrieved data that enables a user to declaratively  
3                    specify which data to use in the generated GUI.

1                    17.     The method of claim 11, wherein the layout interface comprises one or  
2                    more layout options that enables the user to declaratively specify a layout type.

1                    18.     The method of claim 17, wherein the layout type comprises at least one  
2                    of a tabular layout, chart layout, news layout, form layout, and bullet layout.

1                    19.     The method of claim 17, further comprising providing a layout type  
2                    interface that enables the user to specify how the retrieved data should be laid out in the GUI  
3                    using the specified layout type.

- 1                   20.     The method of claim 11, wherein the data source interface does not  
2 include the access information for the data source before it is declaratively specified by the  
3 user.
- 1                   21.     The method of claim 11, wherein the GUI comprises a web-based  
2 page.
- 1                   22.     The method of claim 11, wherein the GUI comprises a portlet.
- 1                   23.     A method for declaratively generating a page using an interface, the  
2 method comprising:  
3                   receiving a declarative specification of access information for a data source,  
4 wherein the access information is input by a user;  
5                   retrieving data using the access information for the data source;  
6                   determining layout information for data from the data source; and  
7                   generating a page using the retrieved data and the layout information.
- 1                   24.     The method of claim 23, wherein the declarative specification  
2 comprises a specification of a data type for the data source.
- 1                   25.     The method of claim 23, wherein the access information comprises a  
2 path to the data source.
- 1                   26.     The method of claim 25, wherein the path comprises a URL.
- 1                   27.     The method of claim 23, wherein the declarative specification  
2 comprises a filtering specification that filters data retrieved from the data source.
- 1                   28.     The method of claim 23, wherein the page comprises a web-based  
2 page.
- 1                   29.     The method of claim 23, wherein the page comprises a portlet.